

# FY98 ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS ANNOUNCED

Immediate Release

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The Department of Defense (DoD) today announced the first increment of nine new fiscal year (FY) 1998 Advanced Concept Technology Demonstration (ACTD) programs designed to evaluate mature technology to meet warfighter needs. The President's FY98 budget includes \$81.1 million for ongoing and new FY98 ACTD programs. This amount leverages over \$2 billion in underlying DoD, military services, and Defense Agency science and technology investments.

More than 75 proposals were submitted by the military services, theater commanders, and Joint Staff. Review of the proposed ACTDs was conducted by the military services and unified commanders, with final reviews and recommendations from the Joint Requirements Oversight Council (JROC) and Office of the Secretary of Defense staff. The JROC also recommended prospective user sponsors and lead services/agencies for the programs. A total of 17 finalists were rank-ordered by the JROC.

The list of approved ACTDs supports operational concepts as defined in Joint Vision 2010: Dominant Maneuver; Precision Engagement; Full Dimensional Protection; and Focused Logistics. According to Joseph Eash III, Deputy Under Secretary of Defense for Advanced Technology, "We made a conscious effort this year to directly support the four key operational concepts outlined in Joint Vision 2010. In this way, we will continue to ensure ACTDs support the needs of the warfighter to the greatest degree possible."

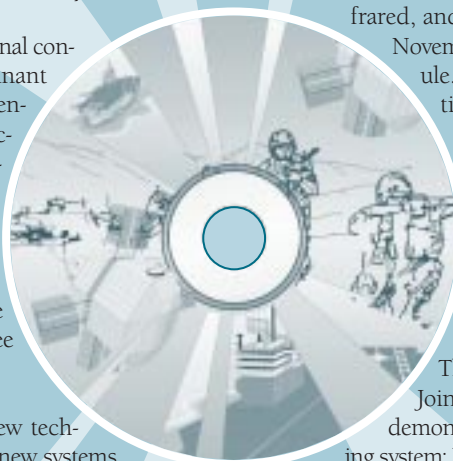
Marrying new operational concepts with new technologies, ACTDs are aimed at rapidly fielding new systems, generally within two to four years. The ACTD is DoD's approach to capturing and harnessing technology and innovation rapidly for military use at reduced costs. ACTDs are designed to directly foster an alliance between the technologists and the warfighters, eliminating barriers and improving the management of these critical efforts. Some 42 ACTDs are now under way, addressing key Joint Warfighting challenges.

ACTDs focus on three principal objectives: to gain an operator's understanding and evaluation of the military utility of new technology applications before committing to acquisition; to develop corresponding battlefield concepts of operation and doctrine that make the best use of the new capability; and to provide residual operational capability to the forces.

The evaluation of military utility is the heart of the ACTD process. After the proposed solution to the military need has been designed, fieldable prototypes are fabricated in sufficient quantity to permit operational utility to be determined. This is typically accomplished by evaluating a minimum operational capability in force-level field ex-

ercises against realistic opposing forces. The evaluation of utility includes effectiveness of individual units, suitability for use by the troops, and overall impact on the outcome of the conflict. As a result of these exercises, the user is able to refine both his concept of operations and his operational requirements for the system, and to assess the overall value of the proposed concept to warfighting capability. This process significantly improves the quality of subsequent acquisition decisions. It also allows the residual systems that were evaluated in the ACTD to remain in the field after the evaluation is completed, providing an early interim capability.

One recent success story demonstrating immediate operational impact is the Predator unmanned aerial vehicle (UAV) deployed with U.S. forces in Bosnia. The Predator is a fully autonomous, relatively low cost UAV that takes advantage of available technology to provide continuous, near all-weather day/night coverage with optical, infrared, and radar sensors. The Predator ACTD began in November 1993 with an ambitious 30-month schedule. In March 1996, the Predator was flying operational missions protecting allied forces. At the conclusion of the ACTD in September 1996, the system was transferred to the U.S. Air Force's newly formed 11th Reconnaissance Squadron, where it remains today, providing improved information to the NATO Stabilization Force. In August 1997, the Predator entered production less than four years after ACTD initiation.



The first increment of approved FY98 ACTDs are: Joint Biological Remote Early Warning System — demonstrates a networked biological threat early warning system; Information Assurance, Automated Intrusion Detection Environment — provides a capability to detect coordinated computer network attacks; Joint Continuous Strike Environment — optimizes use of joint and combined weapons suites on time-critical targets; Joint Modular Lighterage System — moves warfighting materiel from ship to shore in heavy sea states; Link 16 — creates interface between major air and ground tactical data link systems; Precision Target Identification — demonstrates laser radar and advanced forward looking infrared system to obtain precise target location and identification; Unattended Ground Sensors — enables continuous surveillance of critical targets and local weather reporting in denied areas; Theater Precision Strike Operations — provides significantly improved theater-level, near-real-time, synchronized counterfire/precision strike capability; and Line-Of-Sight Anti-Tank System — demonstrates a high-speed, multi-target, anti-tank system for early entry forces.

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